CHAPTER 1
INTRODUCTION

1.1 Background

Science is an important subject for society to be able to understand the phenomenon occurring in our daily life. Therefore, learning science should facilitate students to connect with nature. The 2013 curriculum provides science learning as an integrated subject which also includes the development of curiosity, critical thinking, thinking ability, and being responsible. Learning science also combines several aspects such as skill, attitudes, and knowledge. It can be said that science can be used as a tool to increase student's attitudes and skills. The result of science learning should be reflected in the aspects of spiritual, social, knowledge, and creativity as this is also suggested by the standard of learning outcomes stated by the Indonesian government. Learning science is divided into several topics such as Biology, Physics, Chemistry, and also even Technology and Mathematics.

Some interviews with students resulted that most of them said that when learning science mostly teachers apply the traditional learning method which only delivers the material and questions and answer in the last session especially in learning physics. Therefore, student's motivation is low and most students think learning science is bored. By using technology teachers can create a good strategy of delivering material such as shown the video interactive in case of delivering materials (Juleha, Nugraha, & Feranie, 2019)

The physics topic is very important for students. Learning the Solar system still much of the misconception which influences the academic result of the students. Therefore, learning the solar system should be fun and reduce the misconception in learning solar system topics (Supriatna, Samsudin, & Efendi, 2019). As part of science subjects, physics also describes the phenomenon that students often encounter such as the phenomena of the earth layer which relate to the natural disaster and the earth as a planet. Those two topics are provided in grade 7 on the Solar system topic. The topic of Solar System in curriculum 2013 is provided for 7^{th} grader and it is stated in core competence 3.11 and 4.11.

Delivering material in a teacher-centered way is bored for students. Therefore, teachers should improve the strategy of delivering materials such as usingtechnology. Nowadays technology is proven can increase student's motivation, for example, the use of interactive video in the classroom can improve the physics class atmosphere (Afriani & Agustin, 2019). Not only show the video but the teacher also can make their video using technology. Making videos by teachers can invite students to explore and create the video by their creation, and it is approved can increase the student's motivation in learning science, because students can found and visualize the phenomena by their self. Therefore, students can enjoy when learning science (Prima, Putri, & Rustaman, 2018). Although in nowadays situation the use of technology becoming more common for learning science, however, the misconception in the topic of Solar System still occurring (Supriatna et al., 2019).

Technology is growing rapidly, changes, and improved every year by year era by era. The function of technology is to facilitate human works more easily. One of the technologies that mostly used is a smartphone (Chanapimuk, Sawangmek, & Nangngam, 2018). According to the report published by association namely We Are Social in 2015, there are 37.7% of the total number of 76.7 billion people are gadget users. A smartphone is a very useful technology for the Z generation, which is supported by an internet connection. With the internet connection, we can find material for learning in video or other types of information that can help students understand the content (Kocakoyun, S. & Bicen, 2017).

With technology also students can make their creative video in any content especially in Solar system topics to visualize the concept that students learn. Besides that, making videos also can make students re-explore and can share the information with another student especially in making a video report. Additionally, in making a video report needs additional information from some resources to complete the video report itself (Ferdian, 2019).

Making a video report is very easy for students with intellectual technology. Therefore, making a video report should be consisting of some requirements such

as should conducting the activity for example is making the moon phases model as the laboratory activity in the school. The skill of video editing is also needed by the students to make the video more interesting to be enjoyed by the audience. The completion of the video report by much information also will make the video report rich in the science content (Conde, Miguelanes, Molina, Abad, Riaza, 2011).

Many information published and shown inside the smartphone with available connections, we can explore any information that we need. Unfortunately, the information that spread on the internet is not 100% true or fake. Referring to Fake News –Statistics and Facts published by Watson, 2020 stated 29 percent of the respondent is agreed that information shown on the Internet hoaxes, especially in science content. Related to the study belong to Young Peter R 2012, the Library of Congress stated that, on the internet only 6 percent of the educational or scientific source which can influence the students' information literacy. The rest, 17 percent content on the internet contains a popular single search engine, and 83 percent contain commercial content. The hoaxes in science content Influence students to get any information to support their study. Therefore, the act of Information literacy skills is needed in case of searching for random information on the internet.

Information literacy becomes one concern of education. The researcher was demonstrated most of the students that enter institutions of higher learning unsupported by its' skill. It means that in this era the skill to literate information still lows (Gross & Latham, 2012). According to the OECD survey's findings of information proficiency in Indonesia is about 32.1% below level 1, which means the information literacy in skill most people in Indonesia is low (Jerusalem, 2015). Another relevant research also stated that the students' Information Lieracy skill is in below proficient level of the standard information literacy skill (Gross, Latham, & Armstrong, 2012).

Some researchers stated that information literacy skill still becomes an active area in their research. The American Library Association (ALA) stated that people should able to recognize when the information is needed and people can locate,

evaluate, and use effectively the information. Information literacy skill literate people who have learned how to learn. People know how to learn, because they know how recognizing knowledge, they know how to find the information correctly and effectively, and they know how to use the information itself as the media to learn (Gross et al., 2012).

For academic, professional, and personal development and success, Information literacy skills are including one of the higher-order intellectual skills. Information literacy skills sets of skills share common goals and intersect in many areas especially in education. It is relating to the ability of information literacy skills which involves the process of exploring and evaluating the ideas to make an opinion from one statement or information that students get (Shao & Purpur, 2016).

1.2 Research Problem

According to the background which has already stated, the research problem of this paper is "How is the Video Report using Android Application for Improving Students' Information Literacy Skill in Learning Solar System?"

1.3 Research Question

Based on the research problem, this paper was constructs questions that will be explored, which are:

1. How is the implementation of making a video report in an online learning activity?
2. How is the result of students' information literacy before and after making a video report using the Android application?
3. How is the result of student's video reports using Android application in solar system topics?

1.4 Limitation of Problem

To make this research more focused, the researcher limited this study as follow:

a. Video report

The video report is a media of students for improving Information literacy skills. According to Gooseberry, 2019 there are 8 types of reports, therefore this research is limited by one kind of report which is a video report that enters Informational or Analytical reports that also relate to scientific research. Making reports also a teaching strategy that is commonly used by teachers. In this research, the teaching strategy is limited by making video reports to make the students become active and enthusiastic learners (Ferdian, 2019).

b. Information literacy

Information literacy here is students can locate, evaluate, and use the information effectively which was stated by the American Library Association in 1989. In this study, the researcher limited the research only to view the effect of the video report to improve students Information Literacy skills.

c. Solar system

The solar system in this research as teaching material and limited to describe the characteristic of the component in the solar system, the sun-earth, and the moon, moon phase, and the eclipse. the activity that students do in making a video report is making moon phases model as a content for the video report. It is based on the basic competence and core competence in the 2013 curriculum in point 3.11 and 4.11.

1.5 Research Objective

Through the research questions that were stated, the objectives of this study are:

1. To evaluate the students' information literacy skills in the process of making video reports using Android application in learning solar system.
2. To design the video report based on students' information and understanding in using the Android application.
3. To improve information literacy after produce the video report using the Android application.

1.6 Research Benefit

After doing this research, this paper will share the benefit to the fellow component, there are:

1. Students can make their information channel and they can share the good information about the experiment through learning science.
2. Teachers can integrate students' Information Literacy skills in produce video about science content.
3. For another researcher could be monitored and compared about the result of the information literacy of the students in Junior High School in Indonesia.

1.7 Organizational Structure of Research Paper

The organizational structure of this research paper is divided into five chapters, which are:

1) Chapter 1: This chapter is consisting of background, research problem, objectives, limitation of the research, benefit, and the organization of research.
2) Chapter II: This chapter explains the literature review of video reports, applications in android, information literacy skills, and solar system topics.

3) Chapter III: This chapter describes the research methodology that uses in this research, instrument explanation, data processing, and research flow diagram.
4) Chapter IV: This chapter explains the result and discussion of this research based on the data.
5) Chapter V: This chapter stated the conclusions and recommendations regarding the research of results based on the discussion in Chapter IV.